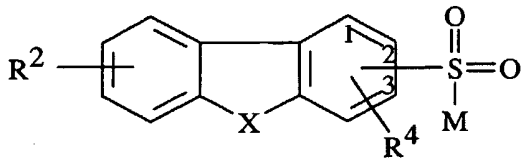
CLAIMS

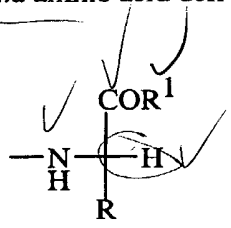
What is claimed is:

1. A method of treating multiple sclerosis, the method comprising administering to a patient having multiple sclerosis a therapeutically effective amount of a compound of Formula I



I

wherein M is a natural (L) alpha amino acid derivative having the structure



X is O, S, $S(O)_n$, CH_2, CO, or NR^Q;

R^Q is hydrogen, C_1-C_6 alkyl, or -C_1-C_6 alkyl-phenyl;

R is a side chain of a natural alpha amino acid;

R^1 is C_1-C_5 alkoxy, hydroxy, or -$NHOR^5$;

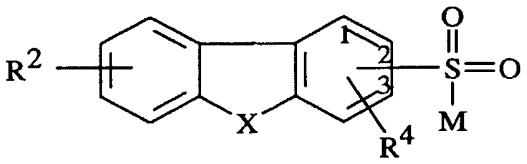
R^2 and R^4 are independently hydrogen, -C_1-C_5 alkyl, phenyl -NO_2, halogen, -OR^5, -CN, -CO_2R^5, -SO_3R^5,-CHO, -COR^5, -$CONR^5R^6$, -$(CH_2)_nNR^5R^6$, -CF_3, or -$NHCOR^5$;

each R^5 and R^6 are independently hydrogen or C_1-C_5 alkyl; and

n is 0 to 2, and the pharmaceutically acceptable salts, esters, and amides thereof, wherein the esters thereof are selected from C_1-C_6 alkyl esters, C_5-C_7 cycloalkyl esters, and arylalkyl esters and the amides thereof are

derived from ammonia, primary C_1-C_6 alkyl amines, secondary C_1-C_6 dialkyl, and 5- and 6-membered heterocyclic amines containing one nitrogen atom; and wherein the group $S(=O)_2M$ is optionally bonded to the 1-, 2-, or 3-position of Formula I.

2. A method of treating arthritis, the method comprising administering to a patient having arthritis a therapeutically effective amount of a compound of Formula I



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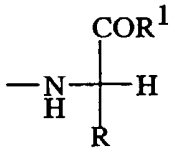
wherein M is a natural (L) alpha amino acid derivative having the structure



X is O, S, $S(O)_n$, CH_2, CO, or NR^Q;

R^Q is hydrogen, C_1-C_6 alkyl, or -C_1-C_6 alkyl-phenyl;

R is a side chain of a natural alpha amino acid;

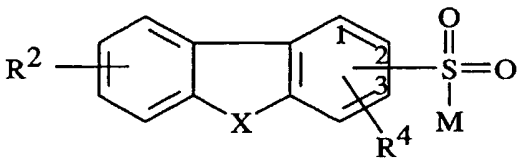
R^1 is C_1-C_5 alkoxy, hydroxy, or -$NHOR^5$;

R^2 and R^4 are independently hydrogen, -C_1-C_5 alkyl, phenyl -NO_2, halogen, -OR^5, -CN, -CO_2R^5, -SO_3R^5,-CHO, -COR^5, -$CONR^5R^6$, -$(CH_2)_nNR^5R^6$, -CF_3, or -$NHCOR^5$;

each R^5 and R^6 are independently hydrogen or C_1-C_5 alkyl; and

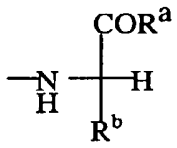
n is 0 to 2, and the pharmaceutically acceptable salts, esters, and amides thereof, wherein the esters thereof are selected from C_1-C_6 alkyl esters, C_5-C_7 cycloalkyl esters, and arylalkyl esters and the amides thereof are derived from ammonia, primary C_1-C_6 alkyl amines, secondary C_1-C_6 dialkyl, and 5- and 6-membered heterocyclic amines containing one nitrogen atom; and wherein the group $S(=O)_2M$ is optionally bonded to the 1-, 2-, or 3-position of Formula I.

3. A compound of Formula I



I

wherein M is a natural (L) alpha amino acid derivative having the structure



X is S, $S(O)_n$, CH_2, CO, or NR^Q;

R^b is a side chain of a natural alpha amino acid;

R^a is C_1-C_5 alkoxy, hydroxy, or -$NHOR^5$;

R^2 and R^4 are independently hydrogen, -C_1-C_5 alkyl, phenyl -NO_2, halogen, -OR^5, -CN, -CO_2R^5, -SO_3R^5,-CHO, -COR^5, -$CONR^5R^6$, -$(CH_2)_nNR^5R^6$, -CF_3, or -$NHCOR^5$;

each R^5 and R^6 are independently hydrogen or C_1-C_5 alkyl; and

n is 0 to 2, and the pharmaceutically acceptable salts, esters, and amides thereof, wherein the esters thereof are selected from C_1-C_6 alkyl esters, C_5-C_7 cycloalkyl esters, and arylalkyl esters and the amides thereof are derived from ammonia, primary C_1-C_6 alkyl amines, secondary C_1-C_6 dialkyl, and 5- and 6-membered heterocyclic amines containing one nitrogen atom; and wherein the group $S(=O)_2M$ is optionally bonded to the 1-, 2-, or 3-position of Formula I.